

WHAT IS CLAIMED IS:

1. A tape heater comprising:  
a heat-resistant, flexible substrate strip;  
a heating element disposed on a surface of the substrate strip, the surface being defined as a heating surface; and  
a wrap comprising a heat-resistant resin sheet, wrapping the substrate strip and the heating element.
2. A tape heater according to Claim 1, wherein the heating element is a heating wire whose periphery is covered with a heat-resistant, insulative layer.
3. A tape heater according to Claim 1, further comprising a heat-conductive material between the heating element and the wrap.
4. A tape heater comprising:  
a heat-resistant, flexible substrate strip;  
a heating wire whose periphery is covered with a heat-resistant insulative layer, the heating wire being disposed on a surface of the substrate strip, the surface being defined as a heating surface;  
a wrap comprising a heat-resistant resin sheet,

wrapping the substrate strip and the heating element; and  
a heat-conductive material between the heating wire and  
the wrap.

5. A tape heater according to Claim 1, further  
comprising a heat-insulating layer between the wrap and the  
surface opposite the heating surface of the substrate strip.

6. A tape heater comprising:

a heat-resistant, flexible substrate strip;

a heating wire whose periphery is covered with a heat-  
resistant insulative layer, the heating wire being disposed  
on a surface of the substrate strip, the surface being  
defined as a heating surface;

a wrap comprising a heat-resistant resin sheet,  
wrapping the substrate strip and the heating element;

a heat-conductive material between the heating wire and  
the wrap; and

a heat-insulating layer between the wrap and the  
surface opposite the heating surface of the substrate strip.

7. A tape heater comprising:

a heat-resistant, flexible substrate strip;

a heating element disposed on a surface of the  
substrate strip, the surface being defined as a heating

surface;

a wrap comprising a heat-resistant resin sheet,  
wrapping the substrate strip and the heating element;

a heat-conductive material between the heating element  
and the wrap; and

a heat-insulating layer between the wrap and the  
surface opposite the heating surface of the substrate strip.

8. A tape heater according to Claim 4, further  
comprising a heat-insulating layer between the wrap and the  
surface opposite the heating surface of the substrate strip.

9. A pipe-heating structure comprising:

a tape heater comprising a substrate strip, a heating  
element disposed on a surface of the substrate strip, and a  
wrap comprising a heat-resistant resin sheet, wrapping the  
substrate strip and the heating element; and

a pipe wound with the tape heater in a spiral manner.

10. A method for applying a pipe-heating structure,  
comprising:

the step of winding a tape heater around a pipe in a  
spiral manner,

wherein the tape heater comprises a substrate strip, a  
heating element disposed on a surface of the substrate strip,

and a wrap comprising a heat-resistant resin sheet, wrapping the substrate strip and the heating element.